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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/246,603	02/08/1999	DAVID LLOYD BROWN	11193.1.1	6366

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EXAMINER

SMITH, RUTH S

ART UNIT	PAPER NUMBER
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3737

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/246,603

Applicant(s)

BROWN, DAVID LLOYD

Examiner

Ruth S. Smith

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claims 36, 46, 55-58 are objected to because of the following informalities: In claims 36, 46, "patient" is misspelled. In claim 55, "the receiver" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell ('997). Campbell discloses a method and apparatus for determining the presence of inflamed plaque in a blood vessel using a catheter having infrared temperature receivers along the outside of the catheter. The signals from the temperature receivers are sent to a display so that an operator can monitor the detected temperatures and determine the presence of inflamed plaque based on the detected temperatures. The catheter includes a guidewire which aids in positioning the receivers near the vessel wall of interest. Campbell does not disclose expressly that the receivers are attached to the guidewire. It would have been obvious to one skilled in the art to have modified Campbell by eliminating the catheter and using the guidewire to provide both a steering mechanism and a receiver placement mechanism. The advantage of such is to reduce overall product cost. Furthermore, it should be noted that at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to position the receivers on the guidewire because Applicant has not disclosed that positioning the receivers on the guidewire provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the receivers positioned in any other arrangement on a side of the device because the ability of the receivers to receive information from the vessel wall is not affected by their location on the housing device as long as the receivers are

positioned near the vessel wall of interest. Therefore, it would have been an obvious matter of design choice to modify Campbell to obtain the invention as specified in the claims. The catheter includes many passageways such as lumen 15, 26-29 which allow fluid to flow past the receivers/sensors without occluding the vessel. Campbell fails to specifically disclose a sensor which determines the presence of plaque based on the detected signals. It is well known in the art to provide a means for automatically providing a diagnosis using a detected signals rather than allowing an operator to do so in order to improve the accuracy of the diagnosis. It would have been obvious to one of ordinary skill in the art to have further modified Campbell such that the detected signals are sent to a sensor for a determination of the presence of plaque to be automatically made in that such is a well known expedient in the art. The use of optical fibers for transmitting optical signals is a well known expedient in the art and the use of such to transmit the detected signals would have been obvious. With respect to claims 33, 54, 58, Campbell discloses that a variety of different type of thermal sensors can be used to detect the presence of inflamed plaque. In the absence of any showing of criticality, the specific type of temperature sensor used would have been an obvious design choice of known functional equivalents in the art.

Response to Arguments

Applicant's arguments filed March 17, 2005 have been fully considered but they are not persuasive. Applicant's arguments regarding the use of a guidewire alone are noted, however, the examiner does not agree that Campbell teaches away from the invention. The elimination of the catheter and the use of only a guidewire alone would have been obvious to one skilled in the art in that it results in elimination of parts and provides a cheaper product to produce. The guidewire can provide both a steering mechanism and a receiver placement mechanism.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ruth S. Smith
Primary Examiner
Art Unit 3737